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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Andreas Roessler

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EXAMINER

PHANTANA ANGKOOL, DAVID

ART UNIT

PAPER NUMBER

2175

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/688,856	Applicant(s) ROESSLER, ANDREAS	
	Examiner David Phantana-angkool	Art Unit 2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the following communications: RCE filed on February 14th, 2008.
2. Claims 1-17 are pending claims.
3. Applicants amended claims 1, 5, 7, 9, 11, 12, and 13.
4. Applicants added claims 15-17.
5. Applicants have amended claim 9. Applicants' amendment has addressed the claim objection, and therefore, in view of the newly submitted amendment, the objection to the claim is withdrawn.
6. Applicants amended claims 13 response to a 35 USC § 101 rejection cited by the examiner in the previous office action (dated 04/04/2006). Applicants' amendment and Remarks have addressed the rejection previously made, and therefore, in view of the amendment, 35 USC § 101 rejection is now withdrawn.

Continued Examination Under 37 CFR 1.114

7. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 14th, 2008 has been entered.

Claim Objections

8. Claim 6 is objected to minor informality.
9. Applicants indicated that claim 6 is amended according to "Amendments to the Claims" submitted on January 25th, 2008. It is noted that the Applicant did not amend claim 6.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. **Claims 1 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable by Lupo et al., US# 6,973,625 B1 (hereinafter Lupo) in view of Joshi et al, US PG PUB# 2004/0122971 A1 (hereinafter Joshi).**

As for independent claim 1:

Lupo shows a computer program product, tangibly embodied in an information carrier, the computer program product comprising instructions operable to cause data processing apparatus to perform operations comprising:

- *detecting multiple changes to a user interface of a computer program, the user interface having multiple user interface elements, each change being a change to one of the multiple user interface elements (3: 54-4: 11);*
- *generating a rendering request for each change, each rendering request specifying the user interface element that has changed and a type of modification to be performed on the user interface element; filtering the rendering requests to eliminate redundant rendering requests [4:*

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52 - 5:7 and 5: 23-34, Lupo shows the system renders certain graphical elements based from the request user input, and therefore the system eliminates rendering unnecessary information.

Based on the user inputs, the system filters what certain graphical elements it to be displayed.

Lupo disclosed the following in Column 5, lines 28-34:

“the framework may disable the submit button until after the user has entered or selected all required information; **make parts of the screen invisible until the user selects a specific check box or radio button, so that the user doesn’t waste time entering unnecessary information**; and/or run a customized function based on the application’s state management requirements” (emphasis added)].

While Lupo suggests *filtering the rendering requests to eliminate redundant rendering requests* in Column 5, lines 28-34, Lupo does not specifically show *filtering the rendering requests to eliminate redundant rendering requests, the redundant rendering requests being identical to or a subset of another rendering request*. In the same field of invention Joshi teaches methods for efficiently and selectively reloading frames of a multiframe Web page or a multiframe window (Paras. 0016-0018). Joshi teaches *filtering the rendering requests to eliminate redundant rendering requests the redundant rendering requests being identical to or a subset of another rendering request* in Para. 0040. Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lupo to incorporate methods of *filtering the rendering requests to eliminate redundant rendering requests, the redundant rendering requests being identical to or a subset of another rendering request* as taught by Joshi, thus eliminating the frame flicker at the receiver side and efficiently using the bandwidth (Joshi, Para. 0040).

As for dependent claim 2:

Lupo-Joshi suggests *the product of claim 1, wherein each rendering request is a request to modify a data structure representing the user interface* (Lupo, 5:40-49).

As for dependent claim 3:

Lupo-Joshi suggests *the product of claim 2, wherein the data structure is a document object model representation of the user interface* (Lupo, 5:40-49).

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As for dependent claim 4:

Lupo-Joshi suggests *the product of claim 1, wherein: the type of modification is a complete re-rendering of the user interface element* (Lupo, 2: 44-64 and 5:23-34).

As for dependent claim 5:

Lupo-Joshi suggests *the product of claim 1, wherein: a first one of the user interface elements comprises multiple attributes; a first one of the rendering requests specifies an update of one or more, but not all, of the attributes of the first user interface element* (Lupo, 2: 44-64 and 5:23-34).

As for dependent claim 6:

Lupo-Joshi suggests *the product of claim 1, wherein the operations further comprise: rendering the user interface based on the filtered rendering requests* (Lupo, 5: 23-34 and 5: 40-49).

As for claims 7-12:

Claims 7-12 reflect the apparatus comprising of computer readable instructions for performing the step of claims 1-6 and are respectfully rejected along the same rationale.

As for dependent claim 13:

Lupo shows a system comprising:

- a processor;
- *a Web page rendered by the process in a Web browser, the Web page including one or more user interface elements; a document object model representation of the Web page, and a framework running in the browser, the framework including* (3:62-4: 11):
 - *one or more trees that store the visualization of the Web page, each user interface element being associated with a portion of the document object model representation and with a portion of the tree* (6:29-40);
 - *wherein each rendering request specifies a user interface element that has changed and a type of modification to be performed on the portion of the document object model representation associated with the specified user interface element* [4: 52-5:7 and 5: 23-34, Lupo shows the system renders certain graphical elements based from the request

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user input, and therefore the system eliminates rendering unnecessary information.

Based on the user inputs, the system filters what certain graphical elements it to be displayed. Lupo disclosed the following in Column 5, lines 28-34:

“the framework may disable the submit button until after the user has entered or selected all required information; **make parts of the screen invisible until the user selects a specific check box or radio button, so that the user doesn’t waste time entering unnecessary information**; and/or run a customized function based on the application’s state management requirements” (emphasis added)].

While Lupo suggests a *filtering mechanism for filtering redundant rendering requests* in Column 5, lines 28-34, Lupo does not specifically show a *filtering mechanism for filtering redundant rendering requests, the redundant rendering requests each being identical to or a subset of another rendering request*. In the same field of invention Joshi teaches methods for efficiently and selectively reloading frames of a multiframe Web page or a multiframe window (Paras. 0016-0018). Joshi teaches a *filtering mechanism for filtering redundant rendering requests, the redundant rendering requests each being identical to or a subset of another rendering request* in Para. 0040. Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lupo to incorporate a *filtering mechanism for filtering redundant rendering requests, the redundant rendering requests each being identical to or a subset of another rendering request* as taught by Joshi, thus eliminating the frame flicker at the receiver side and efficiently using the bandwidth (Joshi, Para. 0040).

As for dependent claim 14:

Lupo-Joshi suggests the system of claim 13, wherein the trees include a UI tree, a data tree, or both (Lupo, 5: 50- 6: 15).

As for dependent claim 15:

Lupo-Joshi suggests the computer program product according to claim 1, wherein:

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*a first rendering request and a second rendering request each specify a first user interface element; the first rendering request specifies a complete re-rendering of the first user interface element; the second rendering request specifies re-rendering a subset of attributes of the first user interface element; and the second rendering request is filtered as a redundant rendering request (Joshi, Para. 0040). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Lupo for the same reason stated previously above (see claim 1 *supra*).*

As for dependent claim 16:

Lupo-Joshi suggests *the computer program product according to claim 1, wherein: the user element is a text field, radio button, table, tray, or menu (Lupo, 5: 28-34).*

As for dependent claim 17:

Lupo-Joshi suggests *the computer program product according to claim 5, wherein the attribute specified by the first rendering request is a color attribute of the first user interface element (Lupo, 12: 58-66).*

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

The Examiner notes MPEP § 2144.01, that quotes In re Preda, 401 F.2d 825, 159 USPQ 342, 344 (CCPA 1968) as stating “in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” Further MPEP 2123, states that “a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989).

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Response to Arguments

13. Applicants' arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Phantana-angkool whose telephone number is 571-272-2673. The examiner can normally be reached on M-F, 9:00-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on 571-272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DP

/David Phantana-angkool/
Examiner, Art Unit 2175

/William L. Bashore/
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